REMARKS

This responds to the Final Office Action mailed on November 21, 2008.

No claims are amended, no claims are canceled, and no claims are added; as a result, claims 1-23 are now pending and subject to examination in this application.

§103 Rejection of the Claims

Claims 1, 2, 5, 6, 9, 10, 13 and 15-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Oestreich (U.S. 6,445,910 B1), hereafter "Oestreich," in view of Warrior et al. (US 7,242,294 B2), hereafter "Warrior".

Claims 3, 4, 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Oestreich (U.S. 6,445,910 B1), hereafter "Oestreich," in view of Warrior et al. (US 7,242,294 B2), hereafter "Warrior", as applied to claims 1, 2 and 10, further in view of Ziv et al. (US 20010018347 A1), hereafter "Ziv."

Claims 7, 8. 14, 22 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Oestreich (U.S. 6,445,910 B1), hereafter "Oestreich," in view of Warrior et al. (US 7,242,294 B2), hereafter "Warrior", as applied to claims 6, 13 and 21, further in view of Smee et al. (US Pat. 6,990,137), hereafter "Smee".

The Applicant respectfully traverses these rejections.

The Final Office Action admits that Oestreich does not disclose a network of sensor nodes wherein multiple independent infrastructure nodes are spaced from each other, and each multiple independent infrastructure node is associated with a different set of wireless sensor nodes. The Final Office Action further admits that Oestreich does not disclose a wireless sensor node that is associated with one of at least two infrastructure nodes.

However, the Final Office Action contends that Warrior discloses multiple independent infrastructure nodes (or access points) 402_{n1} and 402_{n2}, that each independent infrastructure node is associated with a different set of wireless sensor nodes 401_{n1} and 401_{n2}, and that a single wireless sensor node is associated with one of the at least two infrastructure nodes. The Applicant basically agrees with this interpretation of Warrior. Notwithstanding, the Applicant

respectfully submits that it would not have been obvious to one of skill in the art at the time that the invention was made to combine Oestreich with Warrior.

First, the Applicant respectfully submits that the rationale provided by the Final Office Action does not establish a *prima facie* case of obviousness. The Final Office Action contends that it would have been obvious to combine the invention of Oestreich with the teachings of Warrior. That is, to include in Oestreich a network of sensor nodes wherein infrastructure nodes are associated with a different set of wireless sensor nodes. The Applicant respectfully submits that this rationale is faulty, since Oestreich relates to mobile devices that, by their very nature, move from place to place, and as such, any particular base station cannot be associated with any particular set of mobile devices. Rather, the base stations of Oestreich are associated with a constantly changing set of mobile devices, and therefore the teaching of Warrior that multiple sensors are associated with a single access point is simply not applicable to Oestreich, and therefore cannot provide a rationale for combining Oestreich with Warrior.

Moreover, contrary to the contentions in the Final Office Action, the mobile device communication network of Oestreich has no need to sense detailed measurements about a particular local environment. While this may be a function applicable to the sensor network of Warrior, it is inapplicable to the radio communication network of Oestreich. For this additional reason, the teachings of Warrior are inapplicable to Oestreich, and one of skill in the art at the time that the invention was made would not have been motivated to combine Oestreich with Warrior.

Similarly, there is no teaching in Warrior that the wireless sensors 401_{n1} or 401_{n2} should transmit to more than one of its access point nodes 402_{n1} or 402_{n2}. This further illustrates the lack of motivation to combine Oestreich and Warrior. Indeed, FIG. 4 of Warrior, which is cited by the Final Office Action, shows complete separation and independence between the sensor nodes 401_{n1} and the access node 402_{n2}, and complete independence and separation between the sensor nodes 401_{n2} and the access node 402_{n1}.

Furthermore, the teaching of Ostreich relating to a single node transmitting to two base stations is not applicable to Warrior, since there is no hand off needs between the sensor nodes and the access node in Warrior. This lack of need further illustrates the lack of motivation to

combine Ostreich and Warrior, and as such, a *prima facie* case of obviousness has not been established.

Finally, even if one of skill attempted to combine Oestreich and Warrior, there would be little likelihood of success—that is, the result would be an inoperable system. Specifically, the Oestreich reference relates to mobile devices that communicate with two or more base stations during a handoff procedure. If the stationary sensors and access points of Warrior were applied to Oestreich, the mobile devices of Oestreich would become stationary, thereby rendering highly ineffective the mobile radio communication system of Oestreich. Similarly, if the mobile communication devices of Oestreich were applied to Warrior, the sensors of Warrior that are placed in a particular environment for specific sensing purposes would be moved from that area, leaving that area unprotected, and rendering the Warrior system highly ineffective. The Applicant respectfully submits that a *prima facie* case of obviousness is not established when the combination renders the reference inoperable.[1]

In summary, sensor systems have strived to use low power to conserve battery life. The use of low power in a sensor network unfortunately results in low signal strength, which can lead to other problems in the sensor network. The Applicant recognized this shortcoming, and devised the claimed system in which, *inter alia*, a single wireless node transmits a signal to at least two infrastructure nodes, and the signal received at the two infrastructure nodes is subsequently combined and estimated. The Applicant's invention would not have been obvious to one of skill in the art, based on Oestreich and Warrior, either alone or in combination, without the use of hindsight based on the Applicant's disclosure. In short, there is no discussion of this need in the art, and not surprisingly then, no teaching or suggestion in either reference to solve this problem. Consequently, a *prima facie* case of obviousness has not been established, and the Applicant respectfully requests the withdrawal of the rejection of the claims.

[1] *See* MPEP § 2143.01, Part V; *See also In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's representative at (612) 371-2140 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 371-2140

Date December 19, 2008 By

David D'Zurilla
Reg. No. 36,776

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December 19, 2008.

Name

Signature